

# NIST Director's Safety Update

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Under Secretary of Commerce for  
Standards and Technology and  
Director of NIST

*NIST must fully integrate safety into decision-making processes for all aspects of our mission, from planning through mission delivery, over the full life-cycle of programs and projects.*

*We recognize that we must fundamentally change our culture and our way of doing business to achieve lasting and meaningful change to improve safety at NIST.*

# Building Momentum and Leading Change



instill safety culture from bottom up

reinforce importance of safety in office environment

be example to colleagues

make resources available for excellence in safety

hold ourselves accountable

solicit staff reactions

integrate safety into regularly scheduled discussions

communicating safety expectations

elevate/flag safety topics for the organization

check in on staff more frequently

ask questions

not see safety as a chore

integrate safety through lens of equal opportunity

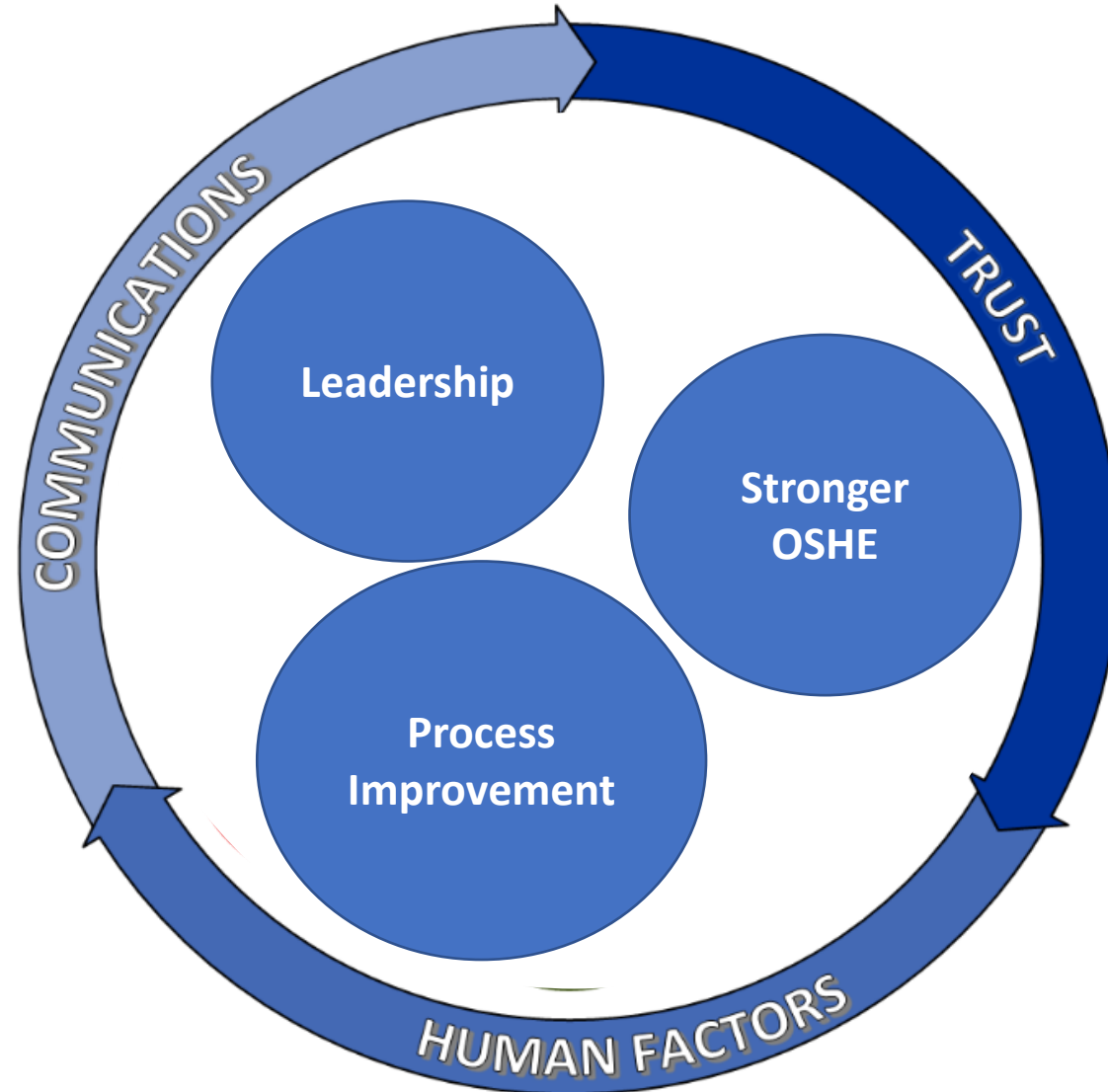
help staff feel empowered to ask questions in safety

champion and live a new safety culture

# Chartered Executive Safety Improvement Team



**Purpose:** Oversee and track to completion safety improvement actions intended to address specific NIST Safety Commission recommendations

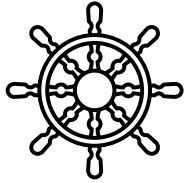


**Process:** Convene teams and empower staff to develop and implement actions, communicate changes

**Accountability:** Report regularly to the NIST Director, inform NLB and staff of progress

- New Hires
- Facilities Repairs
- Safety Assessments
- Professional External Safety Consulting

- Leadership Expectations and Accountabilities:** *NIST must make safety an integral part of the NIST culture, commit to continuous improvement of safety systems, processes and culture.*
- OSHE's Role and Authorities:** *NIST must strengthen the role of the Chief Safety Officer by ensuring the CSO has organizational responsibilities within ERM and SCMMR, and a formal accountability to the NIST Director and of safety professionals by requiring OSHE staff to specify hazard mitigation measures during inspections, investigations and hazard reviews.*
- Processes, Tools and Communications:** *NIST must develop new and enhance existing operational safety processes and tools to actively manage safety related risks, and have processes to assess and elevate risk to enterprise level in a timely manner, and ensure strategic and practical communications that are essential to achieving culture change.*



*NIST must make safety an integral part of the NIST culture and commit to continuous improvement of safety practices and culture*

**Importance:** We recognize that leadership plays an essential role in driving culture change by creating the conditions for positive changes to occur and thrive, and by supporting continuous improvement in safety systems, processes and safety culture NIST-wide.

**Strategy:** Our strategy is to set clear expectations, enforce accountability, ensure communications are strategic and targeted, engage staff at all levels, develop, implement and maintain a Safety Culture Improvement Plan informed by survey data, relevant KPIs, supervisor and staff feedback, and best practices.

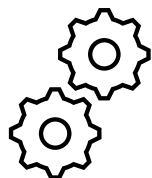


*NIST must strengthen the role of the Chief Safety Officer by ensuring organizational responsibilities within ERM and SCMMR and requiring formal accountability to the NIST Director. NIST must strengthen the role of safety professionals by requiring OSHE staff to specify hazard mitigation measures during inspections, investigations, and hazard reviews.*

**Importance:** NIST recognizes that its post-2008 approach of assigning responsibility for safe operations to line management unintentionally undervalued the expertise of NIST safety professionals, and provided no authority to competent safety staff to enforce basic safety requirements. NIST recognizes value of competent safety professionals and the role they must play in ensuring workplace safety.

**Strategy:** NIST is adopting a strategy that ensures that the CSO is accountable to the NIST Director, informs enterprise-level risk assessments and resource allocations for facility improvements, and that empowers OSHE safety professionals to ensure workplace hazards are properly mitigated.





*NIST must develop new and enhance existing operational safety processes and tools to actively manage safety related risks, and have processes to assess and elevate risk to enterprise level in a timely manner, and ensure strategic and practical communications that are essential to achieving culture change.*

**Importance:** NIST recognizes that safety must be incorporated into administrative and operational processes to achieve a systematic inclusion of safety considerations in all aspects of resource management. Easy to use tools and straightforward, practical communications are essential to support these changes.

**Strategy:** NIST's strategy is to develop a world class safety management system based on established international standards and best practices for continuous improvement, supported by easy to use systems that facilitate completion of safety-related tasks. Communications on safety requirements will include practical training, case studies and lessons learned from incidents to facilitate proper implementation of requirements and improve workplace safety.

**NIST charge to:** understand the effect that hybrid working environments have on safety proficiency, cultures, and practices at federal laboratories

- Provide sound recommendations for integrating safe work practices in a high-quality, fast-paced research environment operating in hybrid mode.
- *Example Questions: How has the shift to a hybrid workplace at federal laboratories impacted safe work practices in laboratory settings, how has this shift affected the safety culture, and what efforts are underway to identify and manage these historic shifts?*

# Workshop Co-chairs Just Identified



**Dr. Carol J. Burns**

Deputy Director for Research,  
Lawrence Berkeley National  
Laboratory



**Dr. Gerald Keusch**

Professor of Medicine  
Associate Director, National Emerging Infectious  
Diseases Laboratories, Boston University

**Safety as a core value**

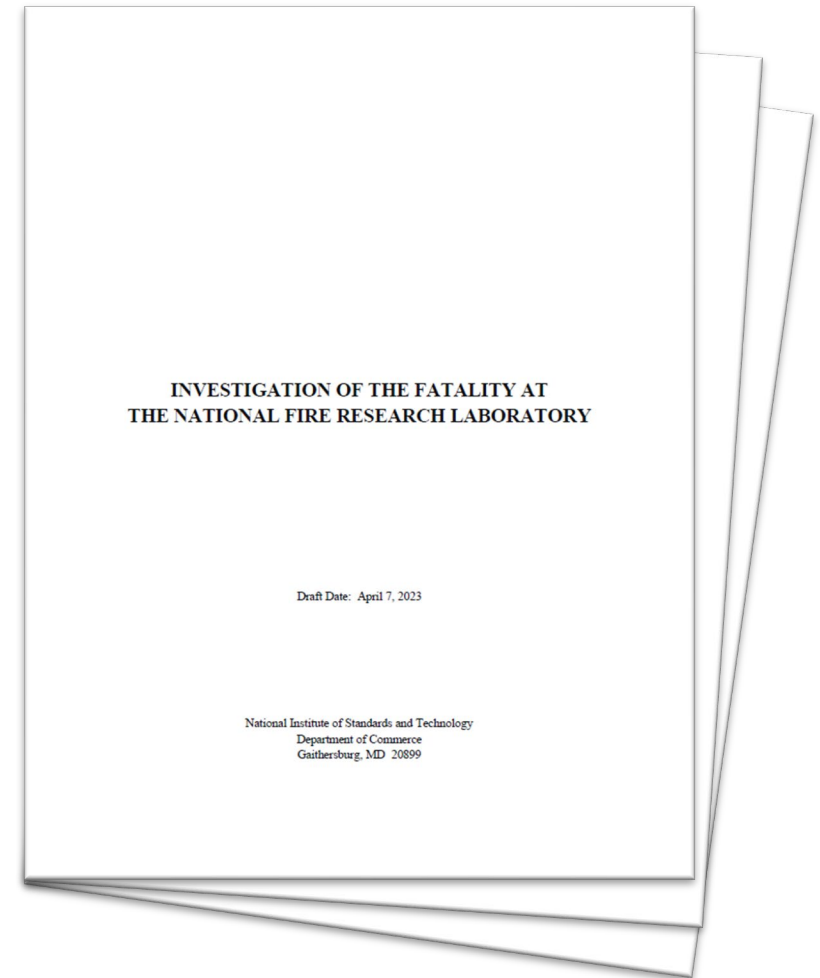
# OSHE Safety Update

Dr. Stephen Banovic  
Deputy Director, Office of Safety,  
Health, and Environment

- Update regarding 9/26 Incident
  - NIST Internal Investigation
  - OSHA Inspections
  
- Current COVID policies and protocols
  
- Performance Metrics

# 9/26 Incident – NIST Report

- NIST Report completed on April 7
- Part A – Investigated the specific incident
  - Two causal factors identified
  - 11 root causes
  - 8 contribution factors
  - 26 corrective actions (“Local”)
  - 11 recommendations
- Part B – Ensured breadth, depth, and sustainability of CAs
  - 15 corrective actions (NIST-wide)
- Weaknesses
  - Safety Management System
  - Safety Culture
- NIST Executive Safety Improvement Program Team chartered



# Key Actions: Leadership Expectations and Accountability



## Strategic Communications

- **Completed:** NIST leadership safety off-site was held to discuss the circumstance of the incident, discuss safety practices, and require leaders to define their commitment to taking personal responsibility for safety
- **Completed:** All-staff Town Hall meeting held; NIST Director committed to taking meaningful actions to improve safety at NIST, conveyed the expectation that all staff must accept personal responsibility for safety and participate in continual improvement of safety
- **Completed:** NIST Director meetings with OSHE staff
- **Underway:** Management by walking around – safety conversations (MOPs)
- **Planned:** NIST Director will host focus groups to discuss safety concerns and safety culture improvement actions
- **Planned:** Strategic communication plan to support roll out of safety improvements

## Safety Culture

- **Completed:** Survey, report issued and posted
- **Completed:** Safety Culture Improvement Plan drafted (May 15, 2023),
- **Planned:** Facilitated employee focus groups to develop bench-level actions (Summer 2023)
- **Planned:** Safety culture benchmarking activities

## Accountability

- **Underway:** Team lead by Human Resources is strengthening safety performance elements
- **Underway:** CSO formally accountable to NIST Director, required regular reports and briefings



# Key Actions: OSHE's Role and Authorities



## Chief Safety Officer

- **Completed:** CSO became a voting member in May of the Enterprise Risk Management Council (ERM)
- **Completed:** CSO to hire additional staff to meet increased responsibilities for workplace inspections, incident investigations, and hazard reviews (May)
- **Underway:** NCNR embed position posted
- **Underway:** CSO is meeting with OU Directors to assess need for embedded safety staff to enhance services and strengthen partnerships
- **Underway:** Assessment of organizational structure of OSHE and other safety-related positions at NIST

## Safety Staff

- **Completed:** OSHE staff member detailed to ERM to assist with risk assessment method development
- **Planned:** Revise workplace inspection program to specify OSHE lead on inspections of workspaces covered by hazard reviews
- **Planned:** Revision of Hazard Review Program to require OSHE staff to participate in hazard assessments for hazardous work
- **Planned:** Building master keys will be provided to BSHE and GSHE Chiefs to ensure safety inspectors and investigators have access to all campus spaces

# Key Actions: Processes and Tools



## Processes

- **Completed:** A new process to facilitate OSHE review of facilities maintenance, testing, and inspections for regulatory compliance
- **Underway:** A comprehensive change management program to proactively manage safety is in development
- **Underway:** Safety checklist for exit-from-duty added to Service Now to ensure proper management of hazardous materials and transfer of safety roles and responsibilities
- **Underway:** ERM team to develop methods for assessing safety related risks, incorporating these into enterprise level risk portfolio
- **Planned:** External ISO 45001 assessment and experts to assist OSHE in developing an audit and assessment program
- **Planned:** Safety program revisions for investigations, hazard reviews, and workplace inspections to improve risk assessments and improve consistency across NIST

## Tools

- **Underway:** Evaluation of COTS IT tools for integrated safety management
- **Underway:** Benchmarking visits to NREL and ORNL to evaluate tools, safety training
- **Underway:** Complete the development of NIST safety dashboard display of workplace inspections, incident investigations, and training actions

## Practical Communications

- **Underway:** Use of Safety Advisory Committee to provide practical communications to targeted audiences to communicate lessons learned
- **Planned:** Revise training to improve relevancy to work conducted, include practical applications that incorporate lessons learned from incidents
- **Planned:** Provide training that discusses the incident and lessons we have learned or must learn

# 9/26 Incident – OSHA Inspection Citations (03/21)

## ➤ Safety Inspection – Three “Serious” Violations

- Employees not protected from fall hazards when working near an unprotected side or edge which was greater than 6 feet above a lower level.
- Floor openings were not covered.
- Employees not protected from overhead fall hazards.

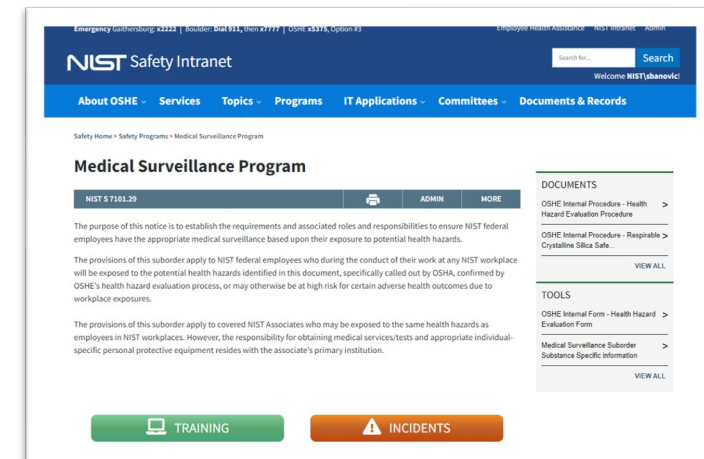


# 9/26 Incident – OSHA Inspection Citations (cont.)

- **Health Inspection** – Five “Other Than Serious” Violations
  - Three related to NIST’s Respiratory Protection program
    - Had not developed a site-specific written respiratory protection program
    - Did not designate a program administrator to administer or oversee the respiratory protection program and to conduct the required evaluations of program effectiveness
    - Employee(s) using tight-fitting facepiece respirators were not fit tested prior to initial use of the respirator
  - Two associated with respirable crystalline silica
    - Did not assess the exposure of each employee who was or may reasonably be expected to be exposed to respirable crystalline silica
    - Did not ensure that each employee has access to labels on containers of crystalline silica and safety data sheets and is trained in accordance with the provisions of HCS

## NIST Abatement Actions

- Chemical Hazard Communication program updated
- New form was developed to document site-specific evaluation and respiratory protection requirements
- Health Hazard Evaluations and Medical Surveillance program created to cover all regulated materials
  - New form to document enrollment in medical surveillance program
  - New Respirable Crystalline Silica Safety procedure



# NIST COVID Policies and Protocols



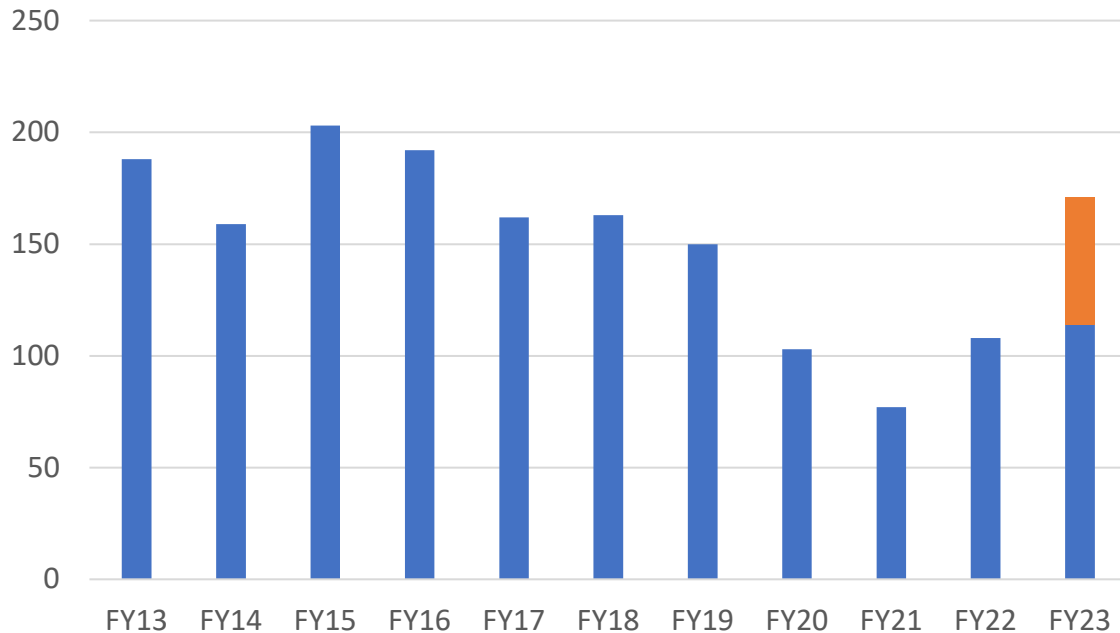
- Updated COVID-19 policies and procedures in effect on Monday, May 22.
- NIST policies and protocols align with CDC guidance to help minimize the potential for COVID-19 infection on our campuses – new NIST S 2200.06: *Managing COVID with the Ending of the Public Health Emergency*.
  - No campus entry screening requirements; however, you stay home when you are ill
  - Campus access restrictions if you test positive for COVID-19
  - Supervisors and sponsors only report work-related COVID-positive cases
  - COVID-19 prevention measures no longer required, may choose to practice
- Updated “COVID-19 Health and Safety” webpage with FAQs

The screenshot shows the NIST Safety Intranet interface. At the top, there is a navigation bar with contact information for Gaithersburg and Boulder, and links for Employee Health Assistance, NIST Intranet, and Admin. A search bar is present on the right. Below the navigation bar, there is a main menu with links for About OSHE, Services, Topics, Programs, IT Applications, Committees, and Documents & Records. The main content area features a breadcrumb trail: Safety Home > Safety Programs > Managing Exposure to COVID-19 on NIST Campuses with the Ending of the Public Health Emergency. The title of the page is "Managing Exposure to COVID-19 on NIST Campuses with the Ending of the Public Health Emergency". To the right of the title is a "DOCUMENTS" section listing "DRAFT --- NIST N 2200.06: Managing Exposure to COVID-19 on..." with a right-pointing arrow and a "VIEW ALL" link. Below the title, there are buttons for printing, ADMIN, and MORE. The main text discusses the ending of the COVID-19 Nation Emergency Declaration and the expiration of the COVID-19 Public Health Emergency, and mentions that NIST has developed a draft of a new directive to govern the changing COVID landscape. A link is provided for "DRAFT---NIST N 2200.06: Managing Exposure to COVID-19 on NIST Campuses with the Ending of the Public Health Order". A section titled "Does NIST have baseline COVID-19 prevention measures?" explains that NIST no longer has general baseline COVID-19 prevention measures because they were tied to COVID Community Levels and CDC is no longer reporting these.

# Incident Reports FY23 (through 5/31/23)



IRIS Cases FY13 - FY23



Total reports includes all incident and near misses

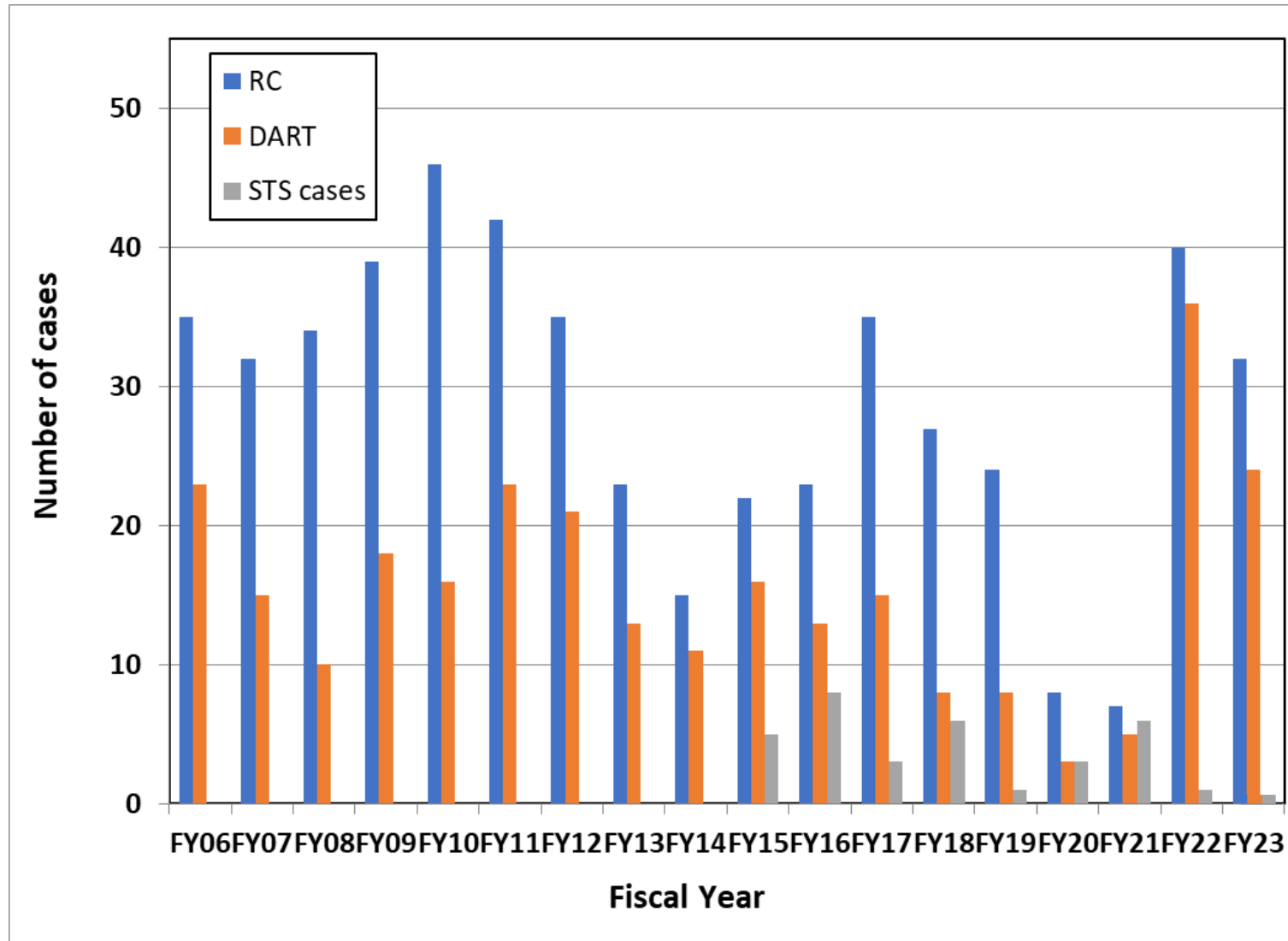
Type	Number of Cases	# of Affected Staff	OSHA Recordable Cases (DARTs)
Injury	26	27	8 (5)
Illness*	28	35	23 (19)
Near Miss	35	0	
Property Damage	7		
Contamination by Radioactivity	4	7	0
Spill / Release	7		
Exposure	3	2	1
Other	4	0	0
<b>Total Cases FYTD</b>	<b>114</b>		

\*27 of 28 illness cases are work-related COVID-19 cases

### Comparison of first 8 months of FY22 to FY23:

- Number of cases more than double (52 vs 114)
- Near Misses almost tripled (12 vs 35)
- Illnesses more than doubled (12 vs 28)
- Injuries up over 60% (16 vs 26)

# OSHA Recordable Cases Representing Days Away, Restricted, or Transferred



32 total recordable cases

## Recordable Illnesses (23)

- 22 are COVID cases with 13 related to travel; 1 STS case
- 19 classified as DART cases (all COVID)

## Recordable Injuries (8)

- 5 classified as DART cases:
  - Slip/fall in restroom results in concussion possibly due to wet footwear.
  - Back and shoulder strain during removal of barrel from fuel oil burner in CUP
  - Employee injured when personnel lift fell off truck lift gate
  - Employee fell on stairs while carrying equipment for outage
  - Employee injured while carrying mail tub

## Recordable Exposure (1)

- Staff member felt ill after being exposed to natural gas odor

# Questions and Discussion